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The Beginnings of the Literary Renaissance of Surgery in England.

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THE Wars of the Roses so troubled England during the fifteenth century that surgery became little more than a handicraft and there is no surgical literature. The process of reconstruction occupied the first half of the sixteenth century and began with an attempt to unite the Fellowship of Surgeons with the Company of Barbers. The former body, impoverished and small in numbers, represented the Consulting Surgeons of to-day—men who had served their apprenticeship in war and found their occupation gone when peace came; the latter, numerous and rich, were the general practitioners of the day, and had obtained a Charter as a Livery Company of the City of London. They performed their duties well, but were commercially-minded and had no wish to ally themselves with impoverished surgeons who were, perhaps, more highly skilled in their science and had certainly seen more of the world; the very wideness of their outlook might make them inconvenient partners for they would be sure to advocate radical changes in a business which was doing well on the old lines.

Better counsels prevailed and relationships changed during the next forty years under men like George Keble, to whom Clowes was apprenticed, Thomas Vicary, Richard Ferris, Sir John Aylef, James Monford and Robert Balthrop. The Surgeons and the Barbers were united into one Body Corporate in 1540, and the revival of Surgery as a profession began at once. The revival proceeded along two main lines, the one administrative, the other literary. It is with the literary side alone that I am concerned to-day.

The cry of the surgical reformers on the literary side was "Back to the Fathers." This same cry was used again in the early nineteenth century when, at the beginning of the Oxford movement, Newman set himself to read and to publish a new edition of St. Ignatius and St. Justin, urging his pupils to follow his example. So, after the Union of the Barbers and Surgeons the leaders of thought began to make a new surgical literature. Some, like Vicary, published without comment the writings of more than a hundred and fifty years earlier; others, like Hall, compared several manuscripts and published a revised version of his author; others again, like Read, Hall's son-in-law, issued an old writer with comments, or printed an unpublished manuscript. Read went further and obtained a translation of parts of the surgery written by Francis Arcaeus (1493-1574), then a modern surgeon; in this he followed the good example of Richard Jonas, who translated and printed Rösslin's *Rosengarten* from the *De partu hominis*. The way being thus prepared, Gale, Clowes and others wrote their own experiences in the form of text-books and monographs which are the foundations of English surgical literature.

The first known edition of Vicary's book is a duodecimo published by Henry Bamforde in 1577. It is called *The Englishman's Treasure*, and was issued posthumously, for Vicary died late in 1561 or early in 1562. There must, however, have been an earlier edition, for John Hall says in his *Treatise on Anatomy* (published in 1565) that he was following—

"the example of good Maister Vicarie, late Sargeante chyrurgien to the queenes highness; who was the first that euer wrote a treatyse of Anatomye in English (to the profite of his brethren chirurgiens and the helpe of young studientes) as farre as I can learne."

The book ran through many editions between 1577 and 1651, being reprinted on each occasion without change. In 1888 it was edited with notes by Dr. Furnivall and Mr. Percy Furnivall and appeared as an extra volume of the *Early English*

Text Society. Dr. J. F. Payne examined it with care, and I published an account of it in the *Transactions of the Bibliographical Society* (*The Library*, vol. ii, 1921-2, pp. 82-88). I see no reason to alter my conclusions then expressed that "There is no doubt Vicary compiled this *Treatise on Anatomy* and issued it with the full knowledge that it was already out of date, because he thought it would be useful to the students of the United Company of Barbers and Surgeons which had been founded in 1540. There is little doubt that he pursued, and perhaps originated, the plan which Hall imitated. He borrowed a manuscript and copied it with such alterations as his limited knowledge of anatomy allowed. He did not know or did not think it worth while to incorporate the work of Vesalius, or even of Geminus who was one of his colleagues, as surgeon to King Edward VI. Vicary worked from a single manuscript, and he printed it in an abridged form."

John Hall proceeded more methodically when he published part of Lanfranc's *Chirurgia Parva*, for he says it

"was translated out of French into the olde Saxony englishe, about two hundred yeres past. Which I haue nowe not only reduced to our vsuall speache, by changying or newe translating suche wordes, as nowe be inueterate and growne out of knowledge by processe of tyme, but also my labours in this behalf with other copies both in Frenche and latin; namely with maister Bacter, for his latine copie and Simon Hudie for his french copie, and other English copies; of the which I had one of John Chamber, and another of John Yates both very ancient with other mo; whose good helpe hath not a little farthered me in these things to the intent that it might perfectly come forth to a public profite which to do I was constreigned not only because I would not truste too muche to myne owne rude judgement; but also that by the authoritie of dyvers men of knowledge, this excellent worke (as it is worthy) may be the more effectually alowed and accepted."

Nothing is now known of Bacter or Hudie, those early bibliophiles of the Tudor period. John Chamber appears in a new light. He has long been known as the first person mentioned in the Charter of the College of Physicians (1518), and Holbein's picture of Henry VIII and the Barber Surgeons has made us familiar with his appearance. He was born in Northumberland in 1470, was educated at Merton College, Oxford, of which he was Warden from 1525 to 1544, and died in 1549. He was buried in St. Margaret's, Westminster. He was physician both to Henry VII and to Henry VIII, and, taking orders in the old Faith, he subscribed to the Reformed Church in 1536 as Dean of the Collegiate Chapel of St. Stephen's, Westminster. He was one of the physicians in attendance on Queen Jane at the birth of Edward VI, and in a letter written by him to the Privy Council concerning the Queen's critical state he signs himself "Priest." He was also in attendance on Anne Boleyn at the birth of Elizabeth. It is pleasant to think of him as assisting at the birth of a great Queen, as well as that of the College of Physicians and of the Barber Surgeons. There is now evidence that he helped at the re-birth of surgical literature.

John Yates was an active member of the Barber Surgeons Company; senior Warden in 1578; a little too free of speech, for in 1566 "he was dismiss for revealing of secrets belonging to the mistery"; and an examiner in surgery in 1570. He is the chief speaker in that pleasant dialogue by Thomas Gale, entitled the *Institution of a Surgeon*.

Hall's *Treatise on Anatomy* is worthy of more attention than it has received. The date of publication is 1565. This is probably about the time it was written, for, in quoting Geminus, he says: "Whereof I gather that Geminus accompted but viii [bones going to make up the upper jaw] though he after (forgetting himselfe) wher he numbereth generally all the bones affirmeth xii." Geminus, therefore, was already dead, and we know that he died in 1560. The *Treatise* is written in English; it is an original work, not a compilation; it is a simple statement of anatomy as Hall knew it. It was up to date, for he quotes Carolus Stephanus, Vesalius, and Mundinus. It was intended for the use of the apprentices and

members of the recently-formed United Company of Barbers and Surgeons, who were obliged to attend the lectures on Anatomy and Surgery given by Dr. Caius until 1563, and by Dr. William Cunningham until 1567. The *Treatise* was therefore a textbook for those unskilled in the Latin tongue. It represents accurately the information given in the lectures of the day and indicates the character of the examination which every apprentice had to pass before he obtained his licence to practise "in London and seven miles round." I have constructed an examination paper which could be answered from the treatise, though it should be premised that the questions would have been asked *coram publico* and the examination would have been wholly oral.

(1) From what are the words Chirurgion and Cancer derived? Give the Greek or Latin equivalents for each.

(2) Mention the complexions of the body. How would you know whether a man was of a sanguine or saturnine complexion?

(3) How many bones are there in the human body?

(4) What are the uses of the Liver? Where does it lie in the body?

(5) Define an imposthume? How can it be cured?

(6) What does a surgeon mean when he speaks of an algebra? How should the condition be treated when it occurs in the upper arm?

(7) Mention in order the structures which would be divided to expose the great ventricle of the brain, beginning from the skin.

(8) Who were Galen, Avicenna, Lanfrancus, Guido Cauliacus, Johannes Vigensis, Andreas Vesalius, Thomas Geminus and Carolus Stephanus? What discoveries or methods of treatment are connected with their names?

N.B.—Questions 7 and 8 need only be answered by those who wish to obtain the Company's great diploma.

Hall knew his limitations in anatomy, and camouflaged his ignorance cleverly under the plea of brevity. Speaking of the deeper parts of the brain, he says:

"But for the copious declaration of the causes of these and other names, with many other circumstances hereunto belonging, for briefnesse sake here I leave the loving reader, unto the perfect enumerations of Galenus, Vesalius and Carolus Stephanus, where thy desires may be satisfied at the full" (p. 39).

In regard to the movements of the heart he was much in the same state as was Harvey when he wrote:

"When first I applied my mind to observation from the many dissections of Living Creatures as they came to hand, that by that means I might find out the use of the motion of the heart, I straightways found it a thing hard to be attained and full of difficulty, so with Fracastorius, I did almost believe that the motion of the heart was known to God alone, for neither could I rightly distinguish which way the diastole and systole came to be, nor when nor where the dilatation and constriction had its existence."

Hall, in a like manner, says:—

"Here also might be to great purpose declared the great secrets of these first movings which are in the heart called in Greek Systole and Diastole, in Latine Contractio and Dilatatio which are compared in this orbicle (of divers learned men) to the *primum mobile* or first mover in the great orb. For these movings are the first cause of all other movings, as of pulses in the arteries and so of all the rest. But because these secrets pass the capacity of the common sort, and also that I should break my purpose of briefness, I omit them and will now speak of the lungs or lights" (p. 68).

These passages show how near the Elizabethan anatomists had come to the circulation of the blood if only they could have thought and experimented as Harvey did half a century later. Harvey reflects the language of the schools when he uses Systole and Contractio indifferently just as Hall did.

Each part of the *Anatomy* ends with "A Conclusion" written in the pleasing Elizabethan style. Here is one:—

“Lo, thus have I ended this second treatise, although grossly and unlearnedly ; trusting notwithstanding that it will be gently borne withal. Truly, my masters and brethren, these are but ears of corn that I gleaned in times past after the bindings of the plentiful sheaves of others, trusting to God that hereafter (though not yet) I shall be able to bind sheaves of mine own and scatter some ears for such as must glean and gather their handfuls of other men’s leavings. Neither wish I that we should any longer live than we should show ourselves profitable one to another. In the which, as we may learn in holy writ and as the divines continually blow in our ears, we shall be known to be the servants of our Lord and Saviour Jesus Christ, who taught his disciples to love [one] another. Saying, by this ye shall be known to be my disciples in that ye love one another. The which love God graunt us all. Amen.”

A much more charming finish than the bald *Finis* of a modern book.

John Hall died in 1568 and I have often wondered whether the book was written in as entirely an altruistic spirit as he would have us believe. He was a young and ambitious surgeon who died at the age of 39 probably of some acute disease. He lived at Maidstone and it is possible that he was thinking of settling in London for he was already in friendly correspondence with Drs. Coldwell and Cunningham, distinguished London Physicians of the time. The anatomical treatise he may have thought would pave the way for his appointment as Reader of Anatomy at the Barber Surgeons Hall, a post which would at once have given him a first-rate position in the profession. If this were his object he was disappointed, for the Minutes of the Barber-Surgeons Company report that on “January xivth, 1566-7, here was Mr. doctor Julyo and he made a request that he might have the work of the anatomy these three or four years so that the college of physicians should not put him from us.” The request was granted and Dr. Julyo replaced Dr. Cunningham who had been lecturer since 1563. Dr. Julyo was Giulio Borgarucci (the elder brother of Prospero Borgarucci, Professor of Anatomy at Padua) who had fled from Italy because he was a Protestant. He was thought to have an evil knowledge of poisons but he had powerful influence for he was physician to the Earl of Leicester and was appointed physician to the Royal Household in 1573.

The *Treatise on Anatomy* may after all have served its purpose, though not in the way hoped for by the writer. Dr. Smith resigned in 1577 and “Mr. Thomas Hall [John Hall’s younger brother] of this company is granted to dissect the Anatomies, private or public, for a term of ten years that shall happen to be within this house and that there shall be yearly four, one private Anatomy at the least and one public if some reasonable cause be not found to the contrary. The same private always to be dissected before the public And the same to be always fetched from the place of execution by the Master and Stewards for the time being.” Thomas Hall had evidently determined to become Lecturer on Anatomy at the Barber Surgeons Hall for he had been to Oxford and had graduated B.A. probably from Broadgates Hall (now Pembroke College) in January, 1567-8, and had taken his M.B., in July 1572, and with it a licence to practise. He then made assurance doubly sure by enrolling himself a Liveryman of the United Company, which he would have had no difficulty in doing as his brother had many friends on the Court and finally he attached himself to the College of Physicians, becoming a Fellow in 1585.

John Read, who had married John Hall’s daughter Cicely, was the last to follow his father-in-law’s example. He was a keen reformer and anxious “that all surgeons ought to have some knowledge of physic and that the Barber’s craft ought to be a distinct mistery from Surgery.” Read published in 1588 an early fifteenth century translation of Arderne’s *Treatises on Fistula* and issued with it two books of the Surgery of Francis Arcaeus, a Spaniard, who died some time after 1574, and a very interesting and practical Tract upon the treatment of Stricture of the Urethra, which he calls, of course, by the name then current of “Caruncle or Carnosity growing in the yard or neck of the Bladder.”

Read, therefore, followed faithfully the lines of John Hall, but times were

changing and there was no longer need to reprint the works of the older English Surgeons, nor seemingly were the surgeons in this country interested in their fellow-workers on the Continent. Men like Gale and Clowes were all-sufficient to themselves and were content to record their own experiences.

Had John Hall lived, he would in all probability have published another book on the lines of his previous work. The manuscript volume in the Bodleian Library (Bodl. MS. 2073, Ms. Bodl. 178) appears to have been in preparation for the Press. Headings have been added, lines have been struck out, and explanations have been introduced. There is no question that the book belonged to John Hall. It contains, in addition to some minor matters such as Prescriptions with English translations and a practical treatise on the compounding of medicines for the use of Surgeons, *A treatise on the French Pox written in Latin by Benedictus Victorius (1481-1561) translated into English by John Hall and the cure of the pox by fuming after Nicholas Massa (d. 1569)*. The two treatises by the Italian Surgeons are greatly abridged. They are followed by a very long manual of medicine. It is incomplete at the beginning and is written throughout on parchment and is approximately of the second half of the fifteenth century. It is in English and treats of man's body in general, of diseases of different parts and organs, eyes, ears, nose, throat, lungs, brain, stomach, etc., under the headings of Causes, Signs and Curation. Finally, there are interspersed in the book letters or Consultations with Dr. Cunningham and Dr. Coldwell about patients whom Hall had been treating and about whose diagnosis he had been in difficulties.

So far I have spoken of books written by surgeons for surgeons, but there is evidence that a book on Surgery was published in the ordinary course of trade in 1543; there must therefore have been a demand for a standard text-book, though it was probably too expensive to command a large sale. It is the first edition of the English translation of John of Vigo. The translator does not give his name but "Bartholomew Traheron wisheth true health and prosperity to Richard Tracey" so perhaps he is responsible for it; Edward Whitchurch printed it with a privilege for seven years. Everyone connected with the book is interesting.

I need say little of so well known a man as John of Vigo. He was born at Rapallo about 1460. His skill in surgery was first recognized during the siege of Saluzzo in 1485 and 1486. Cardinal Giuliano della Rovere, afterwards Pope Julius II, attached him as chief surgeon to his train and thus afforded him such an insight into Italian life as enabled him to write his masterly account of the new disease known as the French pox. His fame was established in 1514 by the publication at Rome of his *Practica in Arte Chirurgica Copiosa Continens Novem Libros*, a work which ran through many editions and was translated into French, Spanish, Italian, English and German within a few years of its issue and into Portuguese many years later.

Bartholomew Traheron seems to have been born in Cornwall and was early left an orphan. He was educated at Oxford either at Hart Hall or at Exeter College where he attained some eminence in Greek and Latin and was persecuted for religion's sake by Dr. John London, the pestilent warden of New College, about whom Foxe has much to say in his *Book of Martyrs*. Traheron migrated, therefore, to Cambridge where he took the degree of B.D. in 1533 being then a friar minorite. He was maintained at the Universities by the liberality of Richard Tracy to whom he dedicates this translation of Vigo and whom he calls, perhaps metaphorically, his father-in-law.

Tracy was of Toddington in Gloucestershire. He was admitted B.A. of Oxford on June 27, 1515, and after studying at the Inner Temple, became M.P. for Wootton Bassett from 1529-36. When Mary came to the throne he was obliged to flee the country on account of his faith.

Traheron, the translator, moved by Tracy, "forsook the puddle of sophisters to fetch water from the pure fountains of the Scripture," as he expresses it. In other words he became a Protestant. He travelled through Germany into Italy, where he doubtless became acquainted with Vigo's book. He was at Zürich in 1537, at Strasburg in 1538. In March, 1538, he was in London in the service of Lord Cromwell. He retired from Court life in 1542 with the avowed purpose of marrying a rich wife, the daughter of a country gentleman who favoured godly doctrine, and of keeping a school for small boys in a country town, but there is no evidence that he succeeded in either of these projects.

King Edward VI appointed him keeper of his library at Westminster upon December 14, 1549, at the annual stipend of 20 marks. He was elected about the same time a burgess in Parliament, where he made strenuous efforts to prevent ambiguity about the Lord's supper in the Liturgy then established. He was living at Oxford in 1550, when he was appointed tutor to the young Duke of Suffolk. King Edward, however, finding him a person of merit caused him to be elected Dean of Chichester, but the Royal mandate was obeyed only after much delay and difficulty on January 8, 1551-2, and he resigned the deanery about December 1552. In September, 1552, he was granted a canonry of Windsor, a similar grant being made him in the following year. At the accession of Queen Mary he relinquished all his preferments, for he was an intemperate writer, and, like Knox and Goodman, regarded government by women as monstrous. He went to Germany a voluntary exile, and in 1555 was acting as divinity reader to fellow exiles at Frankfort. Holinshed states that he died abroad at the latter end of Queen Mary's reign, but Anthony Wood believed that he lived for some years longer. During his exile he seems to have sometimes adopted the name of Pilkington.

The publisher of this edition of Vigo is no less interesting than the translator. He was Edward Whitchurch, who, with his partner, Richard Grafton, printed and published Matthew's Bible and the Great Bible. Soon after the execution of Thomas Cromwell (Earl of Essex) on July 28, 1540, Grafton was imprisoned in the Fleet for six weeks on the charge that he had printed the Bible without notes. After this each partner printed separately, though they were still connected by some exclusive privileges, and this first English edition of Guido appears to be one of the earliest of Whitchurch's separate productions. Whitchurch, like Grafton, was brought up a merchant and was a citizen of London. After the martyrdom of Cranmer he married Ann, widow and second wife of the Archbishop. Whitchurch, lived first at the "Wheel and Two Buckets" in St. Martin's-le-Grand, secondly on the south side of Aldermary Churchyard, and lastly, at the "Swan" in Fleet Street, over against the Conduit, perhaps the old place of business of Wynkyn de Worde.



